CLAIMS

1. An apparatus comprising:

a processor, coupled to a cache memory;

the cache memory with a plurality of cache lines, each cache line with at least one status bit to represent whether the cache line contains a defect; and

a logic to perform at least one test of the plurality of cache lines and to set the status bit for at least one of the plurality of cache lines.

2. The apparatus of claim 1 wherein the logic is a programmable built in self-test (PBIST) logic.

3. The apparatus of claim 1 wherein the logic is a plurality of scan chains and a test access port to accept automatic test pattern generation (ATPG) patterns.

4. The apparatus of claim 1 wherein the status bit is stored in a six-transistor static random access memory cell.

5. The apparatus of claim 1 wherein the status bit is stored in a register file cell.

6. The apparatus of claim 1 wherein the status bit is stored in a fuse.

7. The apparatus of claim 1 wherein the status bit is a read only bit during normal operation of the system.

8. The apparatus of claim 1 wherein the cache memory is either one of a level 0 (L0) cache, level 1 (L1) cache, or level 2 (L2) cache.

9. The apparatus of claim 2 wherein the PBIST logic can set the status bit during initialization of the cache memory.

10. An article comprising:

a storage medium having stored thereon instructions, that, when executed by a computing platform, result in execution of testing a processor's cache memory with a plurality of cache lines;

generating a test pattern;

stimulating the cache memory with the test pattern; and

writing to at least one status bit for each cache line to indicate whether the cache line contains a defect.

11. The article of claim 10 wherein the cache memory is either one of a level 0 (L0) cache, level 1 (L1) cache, or level 2 (L2) cache.

12. The article of claim 10 wherein the status bit is stored in either one of a six-transistor static random access memory cell, a register file cell, or a fuse.

13. The article of claim 10 wherein the status bit is a read only bit during normal operation of the cache memory.

14. A method of configuring a cache memory with a plurality of cache lines comprising:

testing the plurality of cache lines;

setting a status bit for at least one cache line to indicate whether the cache line has a defect as a result of the testing; and

disabling the cache lines when the status bit indicates the defect.

15. The method of claim 14 wherein the setting a status bit comprises storing the bit in either one of a six-transistor static random access memory cell, a register file cell, or a fuse.

16. The method of claim 14 wherein the status bit is stored in either one of a six-transistor static random access memory cell, a register file cell, or a fuse.

17. The method of claim 14 wherein the status bit is a read only bit during normal operation of the cache memory.